

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/912,134	07/24/2001	Patrick Willem Hubert Heuts	NL 000425	4012	
24737 7	7590 02/23/2005		EXAMINER		
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			TRAN, KHANH C		
P.O. BOX 3001			ART UNIT	PAPER NUMBER	
BRIARCLIFF	MANOR, NY 10510		2631		
				DATE MAIL ED: 02/23/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		09/912,134	HEUTS ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Khanh Tran	2631			
Period fo	The MAILING DATE of this communication or Reply	n appears on the cover sheet w	vith the correspondence add	dress		
THE - External formula for a filter for a fi	ORTENED STATUTORY PERIOD FOR R MAILING DATE OF THIS COMMUNICATI nsions of time may be available under the provisions of 37 C SIX (6) MONTHS from the mailing date of this communicatic period for reply specified above is less than thirty (30) days, period for reply is specified above, the maximum statutory per to reply within the set or extended period for reply will, by treply received by the Office later than three months after the ed patent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, however, may a con. a reply within the statutory minimum of the period will apply and will expire SIX (6) MC statute, cause the application to become A	reply be timely filed irty (30) days will be considered timely NTHS from the mailing date of this co			
Status						
1) 又	Responsive to communication(s) filed on	24 July 2001.				
· ·	•	This action is non-final.				
· —	· <del>-</del>					
Dispositi	on of Claims					
5)□ 6)⊠ 7)⊠	Claim(s) <u>1-8</u> is/are pending in the applicated 4a) Of the above claim(s) is/are with Claim(s) is/are allowed.  Claim(s) <u>1 and 5-8</u> is/are rejected.  Claim(s) <u>2-4</u> is/are objected to.  Claim(s) are subject to restriction and subject to restrictio	hdrawn from consideration.				
Applicati	on Papers					
10)⊠	The specification is objected to by the Exa The drawing(s) filed on <u>07/24/2001</u> is/are: Applicant may not request that any objection to Replacement drawing sheet(s) including the control of the oath or declaration is objected to by the	a)⊠ accepted or b)⊡ object the drawing(s) be held in abeya prrection is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CF	` '		
Priority u	ınder 35 U.S.C. § 119					
a)[	Acknowledgment is made of a claim for for   All b) Some * c) None of:  1. Certified copies of the priority docur 2. Certified copies of the priority docur 3. Copies of the certified copies of the application from the International Butter the attached detailed Office action for a	ments have been received. ments have been received in a priority documents have been ureau (PCT Rule 17.2(a)).	Application No n received in this National S	Stage		
Attachment		_				
2)  Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948 nation Disclosure Statement(s) (PTO-1449 or PTO/S r No(s)/Mail Date	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application (PTO- 	-152)		

Art Unit: 2631

### **DETAILED ACTION**

1. The Preliminary Amendment has been entered 07/24/2001. Claims 1-8 are pending in this Office action.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reeb et al. U.S. Patent 6,600,723 B1.

Regarding claim 1, Reeb et al invention is directed to a method for testing and safeguarding the availability of networked system that is assigned to a system carrier, wherein a multiplicity of subscribers exchange data via a bus-type network which is comprised of one or more bus lines. Reeb et al. invention applies to the controller area network communication line as discussed in the Background And Summary Of The Invention; see column 1, lines 50-67; column 2, line 63 via column 3 line 10. In accordance with an embodiment of Reeb et al invention, in column 9, lines 55-67, a gradual displacement of the reference-earth potential can be determined in the case of at least one subscriber during receiving operation. The gradual displacement of the reference-earth potential

Page 3

would correspond to the claimed detection of a ground level shift on the communication line.

Reeb et al. does not expressly teach the step of comparing a current line voltage level to a standard level as claimed in the application claim. However, in column 29, lines 45-67, Reeb et. al method performs one of a discrimination and measurement in a subscriber of at least one dominant source level fed onto at least one line of a bus-type network to detect a reference-earth potential deviation for at least one receiving subscriber in the networked system. Because detection of a reference-earth potential deviation would involve in the step of comparison, it would have been obvious for one of ordinary skill in the art at the time the invention was made that Reeb et al. method performs the comparison step between the at least one dominant source level fed onto at least one line of a bus-type network and a standard level. The motivation is suggested by Reeb et al. teachings recited above.

Reeb et al. further teaches that offsets are stored as status data in the at least one status map as a function of one of a discrimination result and measurement result obtained in the at least one receiving subscriber. In light of the foregoing discussion, the step of storing offsets in the at least one status map corresponds to the claimed "feeding a thresholded version of the comparison to a storage element". The offsets, resulted from the discrimination and measurement step, corresponds to the claimed "thresholded version".

Art Unit: 2631

As taught in Reeb et al. invention, because offsets, representative of reference-earth potential deviation, are stored as status data in the at least one status map, the status map can be triggered by a local transmission signal to output offset values. The offsets are stored in bits as appreciated by one of ordinary skill in the art, the offsets corresponding to the claimed "ground shift sample bit".

Regarding claim 5, referring to figure 1, Reeb et al. method applies to a networked system having different subscribers on a two-wire bus. Reeb et al. method system addresses the claimed method "for use in a bus organization that has multiple transmission stations connected thereto".

Regarding claim 6, claim 6 is rejected on the same ground as for claim 1 because of similar scope. Furthermore, means for performing one of a discrimination and measurement in a subscriber of at least one dominant source level fed onto at least one line of a bus-type network to detect a reference-earth potential deviation for at least one receiving subscriber in the networked system corresponds to the claimed comparing means as set forth in the application claim. The motivation is discussed in claim 1.

Means for storing offsets as status data in the at least one status map as a function of one of a discrimination result and measurement result obtained in the

Art Unit: 2631

at least one receiving subscriber corresponds to the claimed feed means as set forth in the application claim.

Figure 10 illustrates a status map according to Reeb et al. invention. In column 22 line 60 via column 23 line 50, the alarm flags, corresponding the local transmission indicator signal, can be used to trigger the signaling element AD of the subscriber ECU7 via the bus. In figure 2, derived status data C2 corresponds to the claimed "trigger control input". In column 23, lines 30-40, status data characterizing signal criteria can be extracted from the map in a selected fashion via status paths SD01 and SD02. In light of the foregoing discussion, the status map inherently has an output means, corresponding to the claimed "output means as set forth in the application claim".

Regarding claim 7, referring to figure 1, Reeb et al. teaches a networked system having different subscribers on a two-wire bus. The subscriber ECU7 performs the method according to Reeb et al. invention. The subscriber ECU7 corresponds to the claimed "station as set forth in the application claim".

Regarding claim 8, referring to figure 1, Reeb et al. teaches a networked system having different subscribers on a two-wire bus. The networked system corresponds to the claimed "a multi-station system arranged for implementing a method as claimed in claim 1".

Art Unit: 2631

## Allowable Subject Matter

3. Claims 2-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Green et al. U.S. Patent 6,111,888 discloses "Deterministic Serial Bus Communication System".

Kienzler et al. U.S. Patent 5,448,180 discloses "Transmitter End Stage".

Hanf et al. U.S. Patent 6,115,831 discloses "Integrated Circuit For Coupling A Microcontrolled Control Apparatus To A Two-Wire Bus".

Dittmar et al. U.S. Patent 5,784,547 discloses "Method For Fault-Tolerant Communication Under Strictly Real-Time Conditions".

Mimuth et al. U.S. Patent 5,765,031 discloses "Fault Tolerant Output Stage For Digital Two-Conductor Bus Data Communication System".

Bauer U.S. Patent 6,208,924 B1 discloses "Bus System For Data Transfer".

Art Unit: 2631

Page 7

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Tran whose telephone number is 571-272-3007. The examiner can normally be reached on Monday - Friday from 08:00 AM - 05:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**KCT** 

Khanhoong Fran 02/18/2005 Examiner KHANH TRAN